

REMARKS

Claims 1, 2, 10-12, 20-22 and 27 are pending in this application. By this Amendment, claims 1, 10, 11, 20, 21 and 27 are amended and claims 28-33 are added. Support for the amendments to claims 1, 10, 11, 20, 21 and 27 may be found in the specification, for example, at page 21, lines 23-25. Support for the new claims 28-33 may be found at least in Fig. 4, and the corresponding description in the specification, for example, page 18, line 12 - page 19, line 2. Thus, no new matter is added.

The courtesies extended to Applicant's representative by Examiner Pappas in the telephone interview held September 5, 2006, are appreciated. Applicant's separate record of the substance of the interviews is incorporated into the following remarks.

I. Claims 11, 12 and 20 Satisfy the Requirements of 35 U.S.C. §101

The Office Action rejects claims 11, 12 and 20 under 35 U.S.C. §101 for being directed to non-statutory subject matter. The Office Action asserts that "a signal encoded with functional descriptive material" does not fall within any of the categories of patentable subject matter set forth in §101. By this Amendment, independent claims 11 and 20 are amended to cancel "or in a carrier wave." Independent claims 11 and 20 now recite "[a] computer-usable program embodied on an information storage medium" and thus the program is embodied on a computer-readable media. Thus, independent claims 11 and 20, and claim 12 depending from claim 11, satisfy the requirements of 35 U.S.C. §101. Withdrawal of the rejection is thus respectfully requested.

II. The Claims Define Patentable Subject Matter

The Office Action rejects claims 1, 2, 10-12, 20-22 and 27 under 35 U.S.C. §103(a) over Foley ("Computer Graphics: Principles And Practice") in view of Deering (U.S. Patent Application Publication No. US 2003/0011618A1), and further in view of Griffin (U.S. Patent No. 5,990,904). The rejection is respectfully traversed.

Foley, Deering and Griffin, alone or in permissible combination, do not teach or suggest the features of claims 1, 2, 10-12, 20-22 and 27. In particular, none of the applied references teaches or suggests "sorting objects within the depth cueing area so that the objects are drawn in succession starting from the object nearest to the viewpoint; and drawing an image viewable from a virtual camera in an object space in drawing order determined by the sorting processing while performing hidden-surface erasing based on a Z-buffer process for the objects within the depth cueing area," as recited in independent claim 1, and as similarly recited in independent claims 10, 11, 20, 21 and 27. (emphasis added).

The claimed invention sorts objects within the depth cueing area so that objects are drawn in succession starting from the object nearest to the viewpoint, and draws the objects while performing hidden-surface erasing based on a Z-buffer process for the objects within the depth cueing area. In other words, embodiments of the claimed invention performing depth cueing area with respect to the objects within the depth cueing area and unique alpha-value processing that varies an alpha value of the object on the condition that the object is positioned within the depth cueing area so the object is more distant from the viewpoint. Thereby, flickering in the screen may be prevented, i.e., the sudden appearance and disappearance of objects distant from the viewpoint. Moreover, in embodiments the claimed invention, the objects are drawn in succession starting from an object nearest the viewpoint, for the objects within the depth cueing area, which are subjected to the unique alpha-value processing. Thus, the distant object may be prevented from becoming viewable through the nearer object.

As acknowledged by the Office Action, Foley and Deering do not teach or suggest sorting objects and performing hidden-surface erasing based on a Z-buffer process for the objects. However, Griffin does not remedy the deficiencies of Deering and Foley. Griffin merely teaches sorting the fragments in depth order (Griffin, col. 39, lines 59-60). Griffin

does not disclose sorting the objects within the depth cueing area. Griffin merely teaches a technique of suppressing memory consumption, and does not teach or suggest the prevention of flickering. Therefore, Griffin does not disclose sorting the objects within the depth cueing area. Further, Griffin does not perform depth cueing processing or unique alpha-processing within a predetermined area and does not require sorting objects within a predetermined area. Thus, Griffin does not remedy the deficiencies of Foley and Deering.

Thus, for at least these reasons, independent claims 1, 10, 11, 20, 21 and 27 are patentable over Foley, Deering and Griffin. Further, claims 2, 12, and 22, which variously depend from claims 1, 11, and 21, are also patentable over Foley, Deering and Griffin for at least the reasons discussed above with respect to the independent claims, as well as for the additional features they recite. Withdrawal of the rejection is thus respectfully requested.

III. New Claims 28-33

As suggested by the Examiner during the telephone interview, new claims 28-33, which variously depend from independent claims 1, 10, 11, 20, 21 and 27, clarify the depth cueing value.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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